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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/000,219	12/04/2001	Masafumi Nishitani	Q67539	9175

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EXAMINER	
DUONG, THANH P	

ART UNIT	PAPER NUMBER
1764	

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/000,219	NISHITANI ET AL.	
	Examiner	Art Unit	
	Tom P Duong	1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 September 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-7,9-12 and 15-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-7,9-12 and 15-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Applicants' remarks and amendments filed on September 3, 2004 have been carefully considered. Claims 1, 3-7, 9-12, and 15-36 are pending in this application.

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on June 9, 2000. Again, it is noted that applicant has not filed a certified copy of the 2000-173840 application as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1, 3-7, 9-12, and 15-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minabe (5,961,394). Regarding 1, 7, 15-16, and 23, Minabe discloses a wood-type, golf club head comprising a shaft 26 attached to a hollow metal head 12 wherein the metal head (Figure 1) including a plurality of pieces (upper surface 20, side periphery bottom surface 22, face member 10) are welded together by laser welding (Col. 4, lines 1-14). With respect to the face member having a plurality of pieces and fixed together by laser welding, it is

conventional for golf club's manufacture to fabricate the club head body into plurality of pieces to facilitate assembly, optimize mass distribution, and improve structural strength. (See USPN 5,423,535 for one or more face piece component(s) as shown in Figs. 23-26 and Col. 1, lines 40-55; Col. 2, lines 7-44; Col. 3, lines 17-53; and Col. 4, lines 19-39). Minabe discloses joining of club parts by laser welding technique, but does not discloses laser welding the face member including a plurality of pieces. However, Applicant should note that by providing a plurality of face pieces, then laser welding the pieces together will inherently result more welding seams and labor cost. Addition, it would have been obvious in view of Minabe to one having ordinary skill in the art to either laser welding a single piece face member or laser welding face member with plurality of pieces since welding a single face member or welding a plurality of face members is merely a duplication of welding process for joining club parts. With respect to the rolling or forging of metal sheets, it is conventional to manufacture metal parts by rolling, forging, casting, stamping, and punching, and it would have been obvious to do so here to facilitate assembly. (See USPN 5,423,535, Col. 2, lines 8-10). Note, the recitation of the limitation with respect to the laser welding process of the face members is a product by process limitation, and product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even through the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Regarding claims 3-4 and 9-10, Minabe discloses a face member 10 with thickness ranging from 2.5-3.5 mm and head body 12 with thickness about

1.2 mm (Col. 3, lines 25-37), and different alloy materials can be welded together. Regarding claims 5-6 and 11-12, Minabe's club head appears to disclose least 60% of the metal pieces are made of the same material (Col. 3, lines 4, lines 23-27) and the difference in melting points between metal pieces less than 250° or less. With respect to laser welding the metal pieces so that the metal pieces appear on an outside common surface of the striking face member in claim 7, Minabe shows laser welding of the face member 10 with the head body 12 along the periphery front edge and welding along the periphery edge is on the outside common surface of the striking face. Regarding claims 17-18, Minabe shows the welding of outer piece (22) overlapping the inner piece (10). Regarding claim 19, Minabe appears to show the laser welding surface form of a smooth continuous surface. Regarding claim 20, Minabe discloses the face member 10 is plastically deformed to form the face shape by forging process. (Col. 3, lines 40-41). Regarding claim 33, it is conventional to sand and/or buff or post machining to remove the burr resulting from laser welding and it would have been obvious to do so here to provide a smooth finish surface for priming and painting. Regarding claim 34, it is conventional to manufacture metal parts by rolling, forging, casting, stamping, and punching, and it would have been obvious to do so here to facilitate assembly. Claims 21-22 recite limitations similar to claims 7 and 19; thus, claims 21-22 are rejected for the same reasons as applied to claims 7 and 19, above. Regarding claims 24, 27, and 30, Minabe discloses a hollow club head body 12 comprising a shaft (26), opening in the crown (Fig. 1). Minabe does not disclose expressly a crown member made of a plurality of

pieces and the piece appears on the outside of the crown member and fixed by laser welding; and a side wall member made of plurality of pieces and the pieces appears on the outside of the crown member. However, providing a crown member, a side wall member, and a sole member with one piece, two pieces, three pieces, and so on, and joining these pieces by laser welding to form a club head is merely a duplication of forming plural club parts and duplication of welding process. It would have been obvious in view of Minabe to one having ordinary skill to manufacture club head with a few parts or multiple club parts and joining a few club parts or multiple club parts by laser welding technique, since providing club parts into plurality of pieces are merely a duplication of making smaller club parts, which inherently increases labor cost. Claims 25-26, 28-29, and 31-32 recite limitations similar to claim 1; thus, claims 25-26, 28-29, and 31-32 are rejected for the same reasons as applied in claim 1, above. Claim 35 recites limitations similar to claim 33; thus, claim 35 is rejected for the same reasons as applied to claim 33, above. Claim 36 recites limitations similar to claim 34; thus, claim 36 is rejected for the same reasons as applied to claim 34, above.

Response to Arguments

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPN 5,423,535 is cited to shows conventional technique of fabricating striking face with a plurality of face-piece component(s).

Applicant's arguments filed September 3, 2004 have been fully considered but they are not persuasive. (1) With respect to the argument of Minabe does not disclose or suggest metal pieces that "appear on striking face of the head and are fixed together by laser welding", Examiner agrees with such remarks; however, the cited reference USPN 5,423,535 provides support for conventional technique of fabricating one or more face-piece components (Figs. 23-26) to optimize weight distribution, hardness, and aesthetic appearance (Col. 2, lines 13-20). (2) With respect to the argument of Minabe does not disclose or suggest laser welding the face member including a plurality of pieces. Examiner respectfully disagrees since Minabe discloses laser welding of the face member 10 with the head body 12 along the periphery front edge and welding along the periphery edge is on the outside common surface of the striking face. In addition, the recitation of the limitation with respect to the laser welding process of the face members is a product by process limitation, and product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even through the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). (3) Examiner respectfully disagrees with respect to the argument of Minabe does not disclose or suggest welding a plurality of pieces to form a single part and "subsequently perform post-machining to this part to form a golf club surface." The recitation of such limitation is a product-by-process claim and the claim is unpatentable even through the prior art product was made by a different process.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom P Duong whose telephone number is (571) 272-2794. The examiner can normally be reached on 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tom Duong
December 2, 2004
TD

Glenn Caldarola
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